



SEQUENCE LISTING

COPY OF PAPERS  
ORIGINALLY FILED

<110> Szostak, Jack W.  
Roberts, Richard W.  
Liu, Rihe

<120> SELECTION OF PROTEINS USING RNA-PROTEIN  
FUSIONS

<130> 00786/350005

<140> 09/247,190

<141> 1999-02-09

<150> 60/035,963

<151> 1997-01-21

<150> 60/064,491

<151> 1997-11-06

<150> 09/007,005

<151> 1998-01-14

<160> 38

<170> FastSEQ for Windows Version 4.0

<210> 1

<211> 76

<212> RNA

<213> Artificial Sequence

<220>

<223> Translation template

<400> 1

gggaggacga aauggaacag aaacugaucu cugaagaaga ccugaacaaa aaaaaaaaaa  
aaaaaaaaaa aaaacc

60

76

<210> 2

<211> 10

<212> PRT

<213> Homo sapiens

<400> 2

Glu Gln Lys Leu Ile Ser Glu Glu Asp Leu  
1 5 10

<210> 3

<211> 153  
 <212> RNA  
 <213> Artificial Sequence

<220>  
 <223> Translation template

<400> 3  
 gggacaauua cuauuuacaa uuacaauggc ugaagaacag aaacugaucu cugaagaaga 60  
 ccugcugcgu aaacgucgug aacagcugaa acacaaacug gaacagcugc guaacucuug 120  
 cgcuaaaaaa aaaaaaaaaa aaaaaaaaaa acc 153

<210> 4  
 <211> 34  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Random peptide

<221> VARIANT  
 <222> (1)...(27)  
 <223> Xaa is any amino acid.

<221> VARIANT  
 <222> (1)...(34)  
 <223> Xaa = Any Amino Acid

<400> 4  
 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa  
 1 5 10 15  
 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Gln Leu Arg Asn Ser  
 20 25 30  
 Cys Ala

<210> 5  
 <211> 25  
 <212> RNA  
 <213> Tobacco Mosaic Virus

<400> 5  
 gggacaauua cuauuuacaa uuaca 25

<210> 6  
 <211> 10  
 <212> RNA  
 <213> Escherichia coli

<400> 6  
 ggaggacgaa 10

<210> 7  
<211> 34  
<212> PRT  
<213> Homo sapiens

<400> 7  
Met Ala Glu Glu Gln Lys Leu Ile Ser Glu Glu Asp Leu Leu Arg Lys  
1 5 10 15  
Arg Arg Glu Gln Lys Leu Lys His Lys Leu Glu Gln Leu Arg Asn Ser  
20 25 30  
Cys Ala

<210> 8  
<211> 29  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Translation template

<400> 8  
aaaaaaaaaa aaaaaaaaaa aaaaaaacc

29

<210> 9  
<211> 12  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Translation template

<400> 9  
aaaaaaaaaa cc

12

<210> 10  
<211> 24  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Translation template

<400> 10  
cgcggttttt attttttttt ttcc

24

<210> 11  
<211> 42  
<212> RNA  
<213> Artificial Sequence

<220>  
<223> Translation template

<400> 11  
ggaggacgaa augaaaaaaaa aaaaaaaaaa aaaaaaaaaa cc

42

<210> 12  
<211> 42  
<212> RNA  
<213> Artificial Sequence

<220>  
<223> Translation template

<400> 12  
ggaggacgaa cugaaaaaaaa aaaaaaaaaa aaaaaaaaaa cc

42

<210> 13  
<211> 42  
<212> RNA  
<213> Artificial Sequence

<220>  
<223> Translation template

<400> 13  
ggaggacgaa augaaaaaaaa aaaaaaaaaa aaaaaaaaaa cc

42

<210> 14  
<211> 36  
<212> RNA  
<213> Artificial Sequence

<220>  
<223> Translation template

<400> 14  
ggaggacgaa cugaaaaaaaa aaaaaaaaaa aaaacc

36

<210> 15  
<211> 33  
<212> RNA  
<213> Artificial Sequence

<220>  
<223> Translation template

<400> 15  
ggaggacgaa cugaaaaaaaa aaaaaaaaaa acc

33

Official Sequence

Translation template

cugaaaaaaaaa aaaaaaaaaaacc

30

Official Sequence

Translation template

Feature

..(289)

A,T,C or G

cuauuuuacaa uuacaaugnn snnnsnnnsnn	nnsnnnsnnsn nsnnnsnnnsnn	60
nnsnnnsnnsn nsnnnsnnnsnn snnnsnnnsnn	nnsnnnsnnsc agcugcguaa	120
aaaaaaaaaaaa aaaaaaaaaa aaaaaaacc		159

sapiens

tcttgagaga tcagtttctg ttccatttcg	tcctccctat agtgagtcgt	60
		64

sapiens

cactatag	18
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sapiens

<210> 16  
 <211> 30  
 <212> RNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Translation template  
  
 <400> 16  
 ggaggacgaa cugaaaaaaaa aaaaaaaacc 30  
  
 <210> 17  
 <211> 159  
 <212> RNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Translation template  
  
 <221> misc\_feature  
 <222> (1)...(289)  
 <223> n = A,T,C or G  
  
 <400> 17  
 gggacaauua cuauuuacaa uuacaaugnn snnsnnsnns nnsnnsnnsn nsnnnsnnsn 60  
 snnsnnsnns nnsnnsnnsn nsnnnsnnsn snnsnnsnns nnsnnsnnsn agcugcguaa 120  
 cucuugcgcu aaaaaaaaaa aaaaaaaaaa aaaaaaacc 159  
  
 <210> 18  
 <211> 64  
 <212> DNA  
 <213> Homo sapiens  
  
 <400> 18  
 gttcaggtct tcttgagaga tcagtttctg ttccatttctg tcttccctat agtgagtcgt 60  
 atta 64  
  
 <210> 19  
 <211> 18  
 <212> DNA  
 <213> Homo sapiens  
  
 <400> 19  
 taatacgact cactatag 18  
  
 <210> 20  
 <211> 12  
 <212> PRT  
 <213> Homo sapiens  
  
 <400> 20

Met Glu Gln Lys Leu Ile Ser Glu Glu Asp Leu Asn  
 1 5 10

<210> 21  
 <211> 99  
 <212> DNA  
 <213> Homo sapiens

<400> 21  
 agcgcaagag ttacgcagct gttccagttt gtgtttcagc tgttcacgac gtttacgcag 60  
 caggtcttct tcagagatca gtttctgttc ttcagccat 99

<210> 22  
 <211> 21  
 <212> DNA  
 <213> Homo sapiens

<400> 22  
 agcgcaagag ttacgcagct g 21

<210> 23  
 <211> 63  
 <212> DNA  
 <213> Homo sapiens

<400> 23  
 taatacgact cactataggg acaattacta ttacaatta caatggctga agaacagaaa 60  
 ctg 63

<210> 24  
 <211> 33  
 <212> PRT  
 <213> Homo sapiens

<400> 24  
 Met Ala Glu Glu Gln Lys Leu Ile Ser Glu Glu Asp Leu Leu Arg Lys  
 1 5 10 15  
 Arg Arg Glu Gln Leu Lys His Lys Leu Glu Gln Leu Arg Asn Ser Cys  
 20 25 30  
 Ala

<210> 25  
 <211> 127  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Primers for RNA pool

<223> n = a, t, c, or g. s = g or c.

<400> 25  
 ccctgttaat gataaatgtt aatgttacnn snnnsnnnsns nnsnnnsnnns nsnnnsnnnsnn 60  
 snnnsnnnsns nnsnnnsnnns nsnnnsnnns snnnsnnnsns nnsnnsgtcg acgcattgag 120  
 ataccca 127

<210> 26  
 <211> 42  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Primers for RNA pool

<400> 26  
 taatacgact cactataggg acaattacta ttacaatta ca 42

<210> 27  
 <211> 21  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Primers for RNA pool

<400> 27  
 agcgcaagag ttacgcagct g 21

<210> 28  
 <211> 19  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> DNA splint

<400> 28  
 tttttttttt agcgcaaga 19

<210> 29  
 <211> 18  
 <212> DNA  
 <213> Homo sapiens

<400> 29  
 gtggtatttg tgagccag 18

<210> 30  
 <211> 40  
 <212> DNA  
 <213> Phage T7



<400> 30  
 taatacgact cactataggg acacttgctt ttgacacaac 40

<210> 31  
 <211> 20  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> DNA splint

<400> 31  
 tttttttttt gtggtatttg 20

<210> 32  
 <211> 124  
 <212> RNA  
 <213> Homo sapiens

<400> 32  
 gggacaauua cuauuuacaa uuacaauaggc ugaagaacag aaacugaucu cugaagaaga 60  
 ccugcugcgu aaacgucgug aacagcugaa acacaaacug gaacagcugc guaacucuuug 120  
 cgcu 124

<210> 33  
 <211> 20  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> DNA splint

<223> n = a, t, c, or g.

<400> 33  
 tttttttttt nagegcaaga 20

<210> 34  
 <211> 123  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <223> n = a, g, t, or c. s = c or g.

<400> 34  
 agcttttggg gcttgtgcat csnnnsnnnn snnnsnnns nnsnnnsnn nsnnnsnnnn 60  
 snnnsnnns nnsnnnsnn nsnnnsnnnn snnnsnnns nntcctcgc ccttgetcac 120  
 cat 123

<210> 35